



### **Abstract**

A leak detection instrument may comprise a housing, a gas sensor supported relative to the housing, an AE sensor for generating a sound detection input signal upon exposure to gas leakage, processing circuitry for producing output signals, and an output device. The AE sensor may include an elongated mounting member, an AE sensor housing supported by the mounting member, and an AE sensor disposed therein. Improvements to leak detection instruments, an AE sensor mounting assembly and a method of monitoring a device to ascertain leakage of a target gas therefrom are also provided.